



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,385	01/30/2001	Richard Gibbons	087685.00002	2570

33448 7590 04/18/2005

ROBERT J. DEPKE LEWIS T. STEADMAN
TREXLER, BUSHNELL, GLANGLORGI, BLACKSTONE & MARR,
105 WEST ADAMS STREET
SUITE 3600
CHICAGO, IL 60603-6299

EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/774,385	Applicant(s) GIBBONS ET AL.	
	Examiner Stephen M. D'Agosta	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 and 18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 18 have been considered but are moot in view of the new ground(s) of rejection.

1. The applicant's response overcomes the examiner objection for claim 18.
2. A new rejection is found below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "will not be in conflict" in claim 1 is a relative term which renders the claim indefinite. The term "will not be in conflict" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The examiner requires a precise explanation as to what is actually being "defined" by this statement. How does the system determine if there is a conflict? The examiner interprets that it is based on the emergency vehicle being "near" the other vehicle and traveling towards each other, since a vehicle many miles away would not be concerned with an emergency vehicle (especially if both are traveling in opposite directions). So, if the examiner's interpretation of "being in conflict" is based on proximity and direction of travel, exactly how nearby must the emergency vehicle be before it is deemed "in conflict" and the vehicle operator is notified? (Please point to where in the specification the answer is derived/supported).

For the purposes of examination, the examiner will interpret that "conflict" is based on proximity/direction and is calculated by the system.

Art Unit: 2683

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna US 6,252,519 and further in view of Ridnick et al. US 3,997,868 and Gross et al. US 6,326,903.

As per **claim 1**, McKenna teaches a method for alerting vehicles to the presence of an emergency vehicle (title) comprising steps of:

Transmitting a signal which indicates the presence of an emergency vehicle to a plurality of vehicles

Receiving the signal in a vehicle traveling near an emergency vehicle

Generating an alarm signal which indicates the presence of the emergency vehicle (abstract, figures 1-2 and C2, L55-65) **but is silent on** wherein the signal transmitted to the vehicles includes information concerning location and/or direction of the emergency vehicle based on actual location information that is derived from GPS data and wherein the alarm signal is selectively generated depending on whether the location and direction of the emergency vehicle with reference to a location and/or direction of the vehicle receiving the signal indicates the emergency vehicle will not be in conflict with the vehicle receiving the signal.

Ridnick teaches an emergency vehicle warning system that provides both proximity and relative direction of an emergency vehicle in relation to a person's car (C2, L40-53).

The examiner also takes OFFICIAL NOTICE that GPS transceivers are known in the art and would provide more accurate information regarding emergency vehicle location and traveling direction which would be transmitted to said non-emergency

Art Unit: 2683

vehicle. Further to this point is Gross who teaches use of GPS for precise location of a number of emergency vehicles which can be quickly and accurately determined and circulated among the emergency vehicle operators to inform them of an impending collision (see figures 2-5 and abstract). One aspect of the GPS system that justifies the cost is that **relative locations** of other emergency vehicles are determined(C3, L28-34). As a result, each operator is better able to identify potential trouble much more quickly, and take appropriate measures (C5, L14-35). Ribnick (above) teaches a system that determines and alerts other non-emergency vehicles of both proximity and relative direction of emergency vehicles. Hence, one skilled would use the teachings of both Gross and Ribnick to modify McKenna's system to provide means for alerting **non-emergency vehicles** of the relative proximity and direction of an **emergency vehicle**.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify McKenna, such that wherein the signal transmitted to the vehicles includes information concerning location and/or direction of the emergency vehicle based on actual location information or GPS, to provide accurate information to the driver as to where the emergency vehicle is in relation to their car/location.

As per **claim 2**, McKenna teaches claim 1 and the alarm being a flashing light (C3, L11-15 teaches indicator which flashes).

As per **claim 4**, McKenna teaches claim 1 wherein the alarm is an audible tone (C2, L61-65 teaches audible response).

Claims 3 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna and further in view of Kimball et al. US 3,710,313.

As per **claim 3**, McKenna teaches claim 1 **but is silent on** the alarm being a recorded/stored message which indicates a location and/or direction of the emergency vehicle.

Kimball teaches an emergency warning system that has a repetitive recorded message alarm (abstract).

Art Unit: 2683

Ridnick teaches an emergency vehicle warning system that provides both proximity and relative direction of an emergency vehicle in relation to a person's car (C2, L40-53). The examiner notes that one skilled would determine the proximity and direction of the emergency vehicle relative to the user's car and decide whether to transmit the alarm, eg. if the emergency vehicle is far away and traveling in an opposite direction from that of the user, there is no need to signal an alarm to the user/driver, which reads on the claim. That said, one skilled would also just use direction of the emergency vehicle to determine if a signal should be sent, eg. the emergency vehicle may be close(r) to the user but going in an opposite direction which again does not necessarily require a signal to the user/driver.

It would have been obvious to one skilled in the art at the time of the invention to modify McKenna, such that the alarm message is recorded/stored and indicates a location and/or direction of the emergency vehicle, to provide important feedback to the vehicle that an emergency vehicle is nearby (eg. message can distinguish different types of emergency vehicles, how many vehicles, direction, proximity, etc.).

As per **claim 5**, McKenna teaches claim 1 **but is silent on** the signal comprised of a step of receiving the signal with a receiver that receives FM radio signals.

Kimball teaches an emergency warning system that uses an FM transmitter (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify McKenna, such that FM radio signal is used, to provide means for the vehicle's radio to be used since it already has an FM receiver (and is a cheap(er) RF technology).

Claim 18 rejected under 35 U.S.C. 103(a) as being unpatentable over McKenna and further in view of Ridnick and Leonard et al. US 6,072,406 or Robertson US 5,345,232 and Gross (hereafter Leonard or Robertson and Gross).

As per **claim 18**, McKenna teaches a method for alerting vehicles to the presence of an emergency vehicle (title) comprising:

Means for transmitting a signal which indicates the presence of an emergency vehicle to a plurality of vehicles (abstract, figures 1-2 and C2, L55-65)

But is silent on

Transmitting to a base system, and

Means for receiving the signal at the base system controlling and a plurality of stop lights to decrease traffic interference based on a direction of travel for the emergency vehicle wherein the signal transmitted to the base system includes information concerning an actual location and direction of the emergency vehicle that is based on information derived from GPS data.

Ridnick teaches an emergency vehicle warning system that provides both proximity and relative direction of an emergency vehicle in relation to a person's car (C2, L40-53).

Leonard or Robertson teach different embodiments regarding an emergency vehicle having capability to control traffic lights. Leonard teaches the vehicle controls the lights (abstract, figures 1-5 and C1, L59-67) and Roberston teaches that the emergency vehicle provides information to a control program that changes the traffic lights (abstract, figures 3-4, 7 and C5, L66 to C6, L59). Hence, the examiner notes that the control function can be located with the emergency vehicle and/or at a central "base system" or other location.

The examiner also takes OFFICIAL NOTICE that GPS transceivers are known in the art and would provide more accurate information regarding emergency vehicle location and traveling direction which would be transmitted to said non-emergency vehicle. Further to this point is Gross who teaches use of GPS for precise location of a number of emergency vehicles which can be quickly and accurately determined and circulated among the emergency vehicle operators to inform them of an impending collision (see figures 2-5 and abstract). One aspect of the GPS system that justifies the cost is that **relative locations** of other emergency vehicles are determined (C3, L28-34). As a result, each operator is better able to identify potential trouble much more quickly, and take appropriate measures (C5, L14-35). Ribnick (above) teaches a system that determines and alerts other non-emergency vehicles of both proximity and relative direction of emergency vehicles. Gross also teaches **traffic light control** by the emergency vehicle (C4, L38-57). Hence, one skilled would use the teachings of

Art Unit: 2683

both Gross and Ribnick to modify McKenna's system to provide means for alerting non-emergency vehicles of the relative proximity and direction of an emergency vehicle.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify McKenna, such that data is transmitted to a base system which controls traffic/stop lights based on GPS location/direction of emergency vehicle, to provide accurate location means for giving the emergency vehicle mostly green traffic lights to speed its progress to the actual emergency site/location.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
PRIMARY EXAMINER
3-30-04

